Message

Sent: 10/30/2018 7:52:58 PM **To**: tcoxdenver@aol.com

Subject: RE: Preparing to address methodological issues

It might be good to mention how you would like them to address these additional issues. Does it only pertain to Chapters 5-11? Did you want them to consider them as a backdrop for their review or did you want them to specifically discuss these issues as subparts of each charge question? I think if you specifically wanted to discuss these as subparts, that would significantly add to their workload.

-Aaron

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From: tcoxdenver@aol.com [mailto:tcoxdenver@aol.com]

Sent: Tuesday, October 30, 2018 1:55 PM **To:** Yeow, Aaron <Yeow.Aaron@epa.gov>

Subject: Re: Preparing to address methodological issues

Ok, I have added suggested language.

Best,

-- Tony

----Original Message-----

From: Yeow, Aaron < Yeow.Aaron@epa.gov > To: tcoxdenver < tcoxdenver@aol.com > Sent: Tue, Oct 30, 2018 9:36 am

Subject: RE: Preparing to address methodological issues

Can you just add some language to the chair's memo?

-Aaron

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From: tcoxdenver@aol.com [mailto:tcoxdenver@aol.com]

Sent: Tuesday, October 30, 2018 11:33 AM **To:** Yeow, Aaron < Yeow. Aaron@epa.gov >

Subject: Preparing to address methodological issues

Aaron, the following methodological issues for Chapter 5-11 seem to me to be of fundamental importance for drawing sound conclusions.

- 1. Treatment of exposure estimation errors
- 2. Adequacy of lags considered and of modeling for lagged effects
- 3. Control for latent variables
- 4. Cear definition and quantification of direct, mediated, and total C-R causal effects
- 5, Treatment of inter-individual variability and heterogeneity in C-R functions
- 6. Adequacy of non-parametric and model ensemble approaches to studying shape of population C-R functions
- 7. Treatment of manipulative causality (as opposed to associational, attributive, counterfactual, predictive, structural, or mechanistic causality)
- 8. Modeling of interactions and dependencies among explanatory variables

Might it be appropriate for me to draft a somewhat technical memo to the CASAC readers highlighting these methodological issues and asking them to please be ready address them at our December meeting? (I don't want to surprise anyone in December.)

Thanks and Best,

-- Tony

----Original Message-----

From: Yeow, Aaron < Yeow.Aaron@epa.gov>
To: tcoxdenver < tcoxdenver@aol.com>
Sent: Tue, Oct 30, 2018 8:56 am
Subject: RE: Draft Chair Memos

Yes, I will add you to those chapters.

-Aaron

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From: tcoxdenver@aol.com [mailto:tcoxdenver@aol.com]

Sent: Tuesday, October 30, 2018 10:55 AM **To:** Yeow, Aaron < Yeow. Aaron@epa.gov >

Subject: Re: Draft Chair Memos

Aaron, can you please add me as an additional worker on Chapters 5-11 of the PM ISA and on Chapter 5 of the O3 IRP? Otherwise, these look good to go.

Thanks!

-- Tony

----Original Message----

From: Yeow, Aaron < Yeow.Aaron@epa.gov > To: tcoxdenver < tcoxdenver@aol.com > Sent: Tue, Oct 30, 2018 8:04 am Subject: Draft Chair Memos

Tony,

Attached are the draft chair memos that we would send out to the CASAC members along with the review materials and charge questions for the Ozone IRP teleconference and the PM ISA meeting. Please send me any comments/edits that you may have.

We hope to have the ethics review completed shortly.

-Aaron

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